



# Adaptation preparedness scoreboard:

## Draft country fiche for Sweden

### Disclaimer

This draft country fiche was prepared in the context of the implementation of the EU's Strategy for Adaptation to Climate Change (EUAS). The indicators were developed and agreed with experts from the Member States (MS). This draft version of the fiche is published as background information to the public stakeholder consultation about the evaluation of the EUAS running from early December 2017 to early March 2018. It constitutes work in progress, a particular stage of information collection and dialogue between the Commission and the Member States. It presents a snapshot of the status in the country as of September or October 2017. The fiches are planned to be finalised and published as an annex to the strategy's evaluation report in the fourth quarter of 2018, before which they will be further updated and modified. Should you have any specific comments on the draft fiche, please send it to the mailbox [CLIMA-CLIMATE-CHANGE-ADAPTATION@ec.europa.eu](mailto:CLIMA-CLIMATE-CHANGE-ADAPTATION@ec.europa.eu)

Please note that the assessments (yes/no/in progress) need to be read in conjunction with the narrative that accompanies them. They assess the state of play *within* each country. While all effort has been made to ensure the coherence across fiches in the assessment of the same indicator, it should not be directly compared across the MS. Two countries with a "yes" on the same indicator could have a different national situation leading to that assessment. Not all indicators have the "in progress" status, some can only be "yes" or "no". For a more detailed explanation of what each indicator means and how its value is determined, please refer to the description of the scoreboard, a document published alongside the country fiches.

### Contents

POLICY FRAMEWORK .....	2
Adaptation strategies.....	2
A1. National adaptation strategy.....	2
A2. Adaptation strategies adopted at subnational levels.....	3
Adaptation action plans .....	4
B1. National adaptation plan .....	4
B2. Adaptation plans adopted at sub-national level.....	4
B3. Sectoral adaptation plans .....	4

## DRAFT

SCOREBOARD .....	5
Step A: preparing the ground for adaptation .....	5
1. Coordination structure.....	5
2. Stakeholders' involvement.....	6
3. Current and projected climate change .....	8
4. Knowledge gaps .....	9
5. Knowledge transfer.....	10
Step C: identifying adaptation options .....	11
6. Adaptation options' identification .....	11
7. Funding resources identified and allocated.....	12
Step D: Implementing adaptation action.....	13
8 Mainstreaming adaptation in planning processes.....	13
9. Implementing adaptation .....	15
Step E: Monitoring and evaluation of adaptation activities .....	16
10. Monitoring and reporting .....	16
11. Evaluation.....	18
Summary Table .....	19

## POLICY FRAMEWORK

### Adaptation strategies

#### A1. National adaptation strategy

**Sweden expects to adopt a National Adaptation Strategy in 2018. Currently, the Swedish overall policy for climate change adaptation is laid out in 'An Integrated Climate and Energy Policy' bill of 2008.** Adaptation policy efforts are supported by a range of evaluation and strategic documents and implemented at national, regional and local levels.

The Swedish Commission on Climate and Vulnerability was appointed by the Swedish Government in 2005 to assess regional and local impacts of climate change, including costs. The vulnerability report<sup>1</sup> of the Commission (in 2007) makes recommendations, including increased responsibility for municipalities and County Administrative Boards, and facilitates government financial support for large-scale, high-cost initiatives. Since then, the adaptation efforts in Sweden have been stepped up by various means, such as the assignments announced in "An Integrated Climate and Energy Policy"<sup>2</sup> where the government's overall policy for climate change adaptation is laid out. Acknowledging the 2013 Council Conclusion on an EU Strategy for Climate Adaptation, the Swedish

---

<sup>1</sup> SOU 2007:60; Sweden Facing Climate Change – threats and opportunities.

<sup>2</sup> Govt. Bill 2008/09:162

## DRAFT

government announced that a national strategy will be completed in 2018. An inquiry was appointed by the Swedish Government with regard to financing and responsibilities to support the development of the strategy, focusing on the built environment and natural climate-related hazards<sup>3</sup>. The report was presented in the end of May 2017 and is now under consideration by the Government.

In 2015, progress was evaluated by the Sweden's Meteorological and Hydrological Institute (SMHI) in the "Basis for Check point 2015"<sup>4</sup>. In 2017, Sweden adopted a proposal on a new climate policy framework<sup>5</sup>, which however focuses on mitigation. A National Adaptation Strategy is developed and will be adopted in 2018.

The Ministry of the Environment and Energy is responsible for coordinating the government's work on mitigation and adaptation to climate change. In addition, each ministry is in charge of adaptation to climate change within its respective areas of responsibility. Accordingly, the work on climate change adaptation is divided among several government agencies that, based on their respective sectoral responsibilities and as part of their responsibilities according to emergency response management, have important roles to play. Some 30 agencies are working to carry out preventive measures, achieve greater skills and knowledge, and foster better preparedness for disruptions in key society functions.

Since 2009, the administrative boards of the regions (County Administrative Board - CAB) are responsible for climate adaptation at regional level. They also support the adaptation work of municipalities. Since 2013, the CABs have additional responsibilities regarding climate change adaptation, such as the development of regional action plans, in cooperation with relevant stakeholders, to guide the local and regional climate adaptation efforts.

### **A2. Adaptation strategies adopted at subnational levels**

Climate impacts assessments studies have been carried out for all 21 regions; most of them were performed by the Swedish Meteorological and Hydrological Institute. All 21 regions have adopted regional action plans, covering the whole territory of Sweden (see B2).

There is considerable coordination and exchange activity between the 21 CABs. This has for instance resulted in guidance on climate adaptation in physical planning for the regional authorities that was published jointly by the CABs in 2012<sup>6</sup> (see section 9c). Other outcomes include publications by the Stockholm CAB on raised awareness of climate change and related impacts and on health effects as a result of climate change, the latter outlining appropriate human health-related actions based on climate scenarios for the region until the year 2100. The plan clearly outlines management and coordination mechanisms for an effective response, and recognises the need for additional measures for vulnerable areas and social groups (e.g. children and persons above a certain age). The Swedish Civil Contingencies Agency (MSB) has been tasked with supporting municipalities and county administrative boards with overview mapping of stability and flood risks.

---

<sup>3</sup> This investigation has now been completed, and can be found at [contentassets/7931dd4521284343b9224e9322539e8d/vem-har-ansvaret-sou-201742](http://contentassets/7931dd4521284343b9224e9322539e8d/vem-har-ansvaret-sou-201742)

<sup>4</sup> <http://www.smhi.se/tema/nationellt-kunskapscentrum-for-klimatanpassning/nyheter-fran-kunskapscentrumet/underlag-till-kontrollstation-2015-for-anpassning-till-ett-forandrat-klimat-1.79820>

<sup>5</sup> <http://www.smhi.se/tema/nationellt-kunskapscentrum-for-klimatanpassning/nyheter-fran-kunskapscentrumet/underlag-till-kontrollstation-2015-for-anpassning-till-ett-forandrat-klimat-1.79820>

<sup>6</sup> <http://www.lansstyrelsen.se/stockholm/Sv/publikationer/2012/Pages/klimatanpassning-i-fysisk-planering-vagledning-fran-lansstyrelserna.aspx>

## **Adaptation action plans**

### **B1. National adaptation plan**

There is no national adaptation action plan.

### **B2. Adaptation plans adopted at sub-national level**

While climate change adaptation policy is developed at the national level, further strategic action, such as elaboration of regional adaptation action plans, is delegated to the regional level. The CABs were required to develop regional action plans by the end of June 2014. In doing so they were assisted by the national agencies. As a result, the CABs have adopted 21 regional action plans covering the whole of Sweden with nearly 800 proposed actions. The main actions proposed in the plans concern flood protection, protection of drinking water, shoreline protection, infrastructure (roads, railways), adaptation of agriculture and forestry, resilience for heat waves and health care. An overview of the adaptation action plans undertaken in the regions is available as a summary.<sup>7</sup> Several national authorities have developed, or are in the process of developing, action plans for the sectors for which they are responsible. A number of local authorities have also developed adaptation strategies or plans for their municipality, e.g., Stockholm, Malmö, Växjö.

### **B3. Sectoral adaptation plans**

Within the existing adaptation framework, Sweden is carrying out work in a considerable number of sectors that are of relevance to climate change adaptation. The Swedish climate change adaptation work is to a large extent organised into sectors. During 2016, the previous network of authorities behind the National Portal for climate change adaptation has transformed into the National Network for Adaptation, with a wider remit. 19 national authorities with responsibilities for adaptation participate in the network, which aims to increase the resilience of society to climate change. The secretariat for the network is provided by SMHI. The Government also distributes assignments related to various measures to sector agencies. Most adaptation issues are multidisciplinary, meaning that work on climate adaptation is largely performed in collaboration between different actors and sectors at the national, regional and local level.

Several national authorities have developed, or are in the process of developing, action plans for the sectors for which they are responsible. The sectors that are addressed are related to critical societal functions: Biodiversity and ecosystem services, Fresh water supply (drinking water, sewage, effluent and stormwater treatment), Health, Infrastructure (transportations, telecommunication), Rural businesses (agriculture, fisheries, forestry, reindeer herding, tourism), Technical supply systems (energy supply, hydroelectric dam security, heating and cooling), Urban areas (buildings and built environment, cultural heritage). Sweden has a well-established and functioning framework for disaster risk reduction (DRR), including work in forums for crisis preparedness. The work is coordinated by the Swedish Civil Contingencies Agency (MSB). The cooperation on all levels and between sectors and actors working with land use planning, risk management, natural disasters and climate adaptation is promoted to reduce risks and enhance preparedness.

There is a number of existing coordination fora in Sweden where experiences and planning of key adaptation actions are currently exchanged between sector agencies and other stakeholders. In addition to the network on adaptation, these include the Agency

---

<sup>7</sup> <http://www.klimatanpassning.se/roller-och-ansvar/vem-har-ansvaret/regionala-handlingsplaner-for-klimatanpassning-1.77455>

## DRAFT

network for shore erosion, the Committee on dimensioned flows in hydroelectric dams in a changing climate, the Delegation for landslides and the National network for drinking water.

An overview of the completed<sup>8</sup> and ongoing<sup>9</sup> adaptation activities and remits at the national authorities level is available at the climate adaptation website.

### SCOREBOARD

#### Step A: preparing the ground for adaptation

##### 1. Coordination structure

###### 1a. A central administration body officially in charge of adaptation policy making

**Yes** / No

The Ministry of the Environment and Energy is responsible for coordinating the government's work on mitigation and adaptation to climate change.

###### 1b. Horizontal (i.e. sectoral) coordination mechanisms exist within the governance system, with division of responsibilities

Yes / **In progress** / No

Horizontal coordination within the Government takes place through the regular work process within the Government Offices, in which all decisions builds on joint decision-making and the Government's decisions are taken by consensus.

In addition, each ministry is in charge of adaptation to climate change within its respective areas of responsibility. Accordingly, the work on climate change adaptation is divided among several government agencies, based on their respective sectoral responsibilities and as part of their responsibilities according to emergency response management.

Many central agencies (about 30) play an important role in adaptation to climate change. Each has its clearly defined sectoral responsibility, which also includes emergency response management and adaptation to climate change. The sectors span society and include nature conservation and environmental protection, social care, communications, food inspection, animal welfare and general veterinary issues, agriculture, reindeer husbandry, fishing, gender equality, cultural heritage, regional development, sustainable planning and housing, civil defence, crisis management in peacetime and rescue services.

Several central agencies have developed sectoral action plans for adaptation. In many cases, this work was carried out as an activity within the Network for Adaptation, which gathers 19 central authorities with an important role to play. The Network, which is administrated by SMHI, meets several times a year and aims to facilitate horizontal coordination between national governmental bodies. One of the projects currently ongoing is to coordinate and improve the provision of spatial data that can be of use to planners working on adaptation, but which is provided by several different authorities.

This means that climate change adaptation is also mainstreamed and integrated into the work of specialised government agencies including: the Swedish National Board of

---

<sup>8</sup> <http://www.klimatanpassning.se/roller-och-ansvar/genomforda-aktiviteter/vad-har-gjorts-pa-myndigheterna-1.100055>

<sup>9</sup> <http://www.klimatanpassning.se/roller-och-ansvar/kommande-underlag/pa-gang-fran-myndigheterna-2017-1.119693>

## DRAFT

Housing, Building, and Planning, the Swedish Meteorological and Hydrological Institute (SMHI); and the Swedish Civil Contingencies Agency. The Swedish Environmental Protection Agency has developed an action plan with the overall aim of integrating the perspective of a changing climate in the agency's ongoing work on biodiversity so that measures and tools are appropriate. Action plans with similar aims has been or are in the process of being developed by several other sectors too (see B2). Some 30 agencies are working on prevention, increased competence and knowledge as well as improved preparedness for disruptions in vital public services.

At the regional level, the CABs have their own coordination network. This network also aims to facilitate coordination of adaptation, but at the regional level.

At the municipal level, the Swedish Association of Local Authorities and Regions (SKL) also has its own adaptation network, which gathers municipalities. The aim is to support municipalities in their adaptation work, and to provide a forum for dialogue and exchange of experiences.

### **1c. Vertical (i.e. across levels of administration) coordination mechanisms exist within the governance system, enabling lower levels of administration to influence policy making**

Yes / In progress / No

The roles and responsibilities of climate change adaptation in Sweden are divided across different levels – from local and regional to national. Since 2009, the county administrative boards have the overarching regional responsibility to coordinate climate adaptation. Regional adaptation plans are available for all 21 regions. In addition to the regional responsibility, county boards are providing planning support for “their” municipalities. They follow up the work carried out on adaptation, and have the power to review and examine decisions on physical planning taken by the local authorities.. Inter-municipal and transboundary aspects such as floods are also being coordinated. Support to the municipalities in terms of information and advice is also given by many national authorities. Municipalities in Sweden have a considerable degree of autonomy which also includes decisions on adaptation to climate change. Local self-government and the right to levy taxes are stipulated in the Instrument of Government, one of the four pillars of the Swedish Constitution. The municipalities are legally or contractually responsible for example water supply and sewage, infrastructure, traffic, public transport, physical planning, environmental issues and rescue services and emergency preparedness.

The Covenant of Mayors for Climate and Energy has 56 signatories and 2 regional coordinators in Sweden. There is no consistent feedback mechanism for the lower level governance to regularly and proactively interact with national level to influence higher level decision making.

## **2. Stakeholders' involvement in policy development**

### **2a. A dedicated process is in place to facilitate stakeholders' involvement in the preparation of adaptation policies**

Yes / No

Stakeholders involvement is good practice in Sweden, they are involved in developing adaptation plans at the county and municipal level as well as in various research project exploring adaptation policy options in sectors, e.g. in forestry. Numerous stakeholders contribute to Sweden's adaptation landscape. The overall Swedish policy is to actively support dialogue, participation and the creation of networks between relevant actors at

## DRAFT

all levels. Stakeholders engaged are typically from the public (including academic experts) as well as from the private sector. Each sector is responsible for their area of work and to ensure actions are taken by different stakeholders concerned. The level of progress across sectors differs, i.e. some sectors have come a long way while others are just starting. A report<sup>10</sup> of the Swedish Environment Institute IVL for the Stockholm County Administrative Board identifies business players in Stockholm who are interested in cooperation, knowledge and experience in developing new solutions for climate adaptation. Four dialogue events with private sector representatives were organised in 2014. Such dialogues were also carried out in 2015 as part of SMHI:s work with the report on a "Basis for Check-point 2015 for adaptation to a changing climate" ("Underlag till kontrollstation 2015 för anpassning till ett förändrat klimat"). In addition, there is ongoing sector specific dialogue between national authorities and different stakeholders.

### **2b. Transboundary cooperation is planned to address common challenges with relevant countries**

**Yes** / No

Sweden participates in various international frameworks and programmes, e.g. it is one of the leading countries in the context of the EU macro-regional Strategy for the Baltic Sea Region (EUSBSR, 2009)<sup>11</sup>, and there is exchange of information with other Nordic Countries mainly at the scientific level. The climate agenda is driven by the active work of the Baltic 2030 Unit of the Council of the Baltic Sea States (CBSS) Secretariat<sup>12</sup> which is in charge of the EUSBSR Horizontal Action CLIMATE<sup>13</sup>. The EUSBSR is a front runner in the area of climate change. The Baltadapt project<sup>14</sup> formulated a Strategy and Action Plan on Adaptation to Climate Change in the Baltic Sea Region. The governance mechanisms, such as, the Baltic Sea Region Climate Dialogue Platform<sup>15</sup> involve all countries around the Baltic Sea and their different levels of governance helping to advance climate adaptation in the Baltic Sea countries. There are many significant projects on adaptation being implemented under the EUSBSR, e.g. iWater Integrated Storm Water Management<sup>16</sup> (2015 – 2018).

There is also active participation in international research projects, interest groups and working groups, within and outside of the EU.

---

<sup>10</sup> <http://www.lansstyrelsen.se/stockholm/SiteCollectionDocuments/Sv/miljo-och-klimat/klimat-och-energi/klimatanpassning/klimatanpassningsprojekt/Formering%20av%20n%C3%A4tverk%20f%C3%B6r%20klimatanpassning/rapport-formering-av-natverk.pdf>

<sup>11</sup> <http://www.balticsea-region-strategy.eu/>

<sup>12</sup> <http://www.cbss.org/strategies/horizontal-action-climate/>

<sup>13</sup> <http://www.cbss.org/wp-content/uploads/2015/11/CBSS-PL-PRES-non-paper-on-sustainable-development-and-climate-change-adaptation.pdf>

<sup>14</sup> <http://www.baltadapt.eu/>

<sup>15</sup> <http://www.cbss.org/strategies/horizontal-action-climate/>

<sup>16</sup> <http://www.integratedstormwater.eu/>

## DRAFT

### **Step 2: assessing risks and vulnerabilities to climate change 3. Current and projected climate change**

#### **3a. Observation systems are in place to monitor climate change, extreme climate events and their impacts**

Yes / **In progress** / No

The Swedish Meteorological and Hydrological Institute (and its Rossby centre) collects observational data<sup>17</sup> nationally from the atmosphere, rivers and surrounding seas. These data are quality controlled and used in weather forecasting, climate modelling and assessments. SMHI has also produced a number of climate indicators to show changes or to illustrate complex phenomena in a simple way. The common measures are yearly, seasonal or monthly values for different parameters that describe the climate. SMHI's Rossby Centre pursues research on climate processes and the behaviour of the climate system. The principal tools are global and regional climate models developed within the research unit. The Swedish Environmental Protection Agency is responsible for coordinating environmental monitoring. This monitoring helps those concerned to follow the effects of climate change in all biogeochemical systems but also, in the long term, involves following trends in how the measures adopted affect ecosystems and society. A database of natural disasters is kept by the Civil Contingencies Agency, but does not contain information about costs. Some monitoring on economic impacts is carried out by the industry association for insurers, Swedish Assurance.

#### **3b. Scenarios and projections are used to assess the economic, social and environmental impacts of climate change, taking into account geographical specificities and best available science (e.g. in response to revised IPCC assessments)**

**Yes** / In progress / No

SMHI's Rossby Centre presents climate scenarios<sup>18</sup> as maps, as diagrams and as downloadable data, with scenarios extending to 2100. There is also information explaining the results and the models on which they have been based. An introduction to climate scenarios is available (in Swedish) as well as guidance (in Swedish) that provides support for interpreting and using climate scenarios. Reports from SMHI provide geographically detailed information about climate trends in Sweden, depending on future levels of greenhouse gases. The climate analyses can be used for community planning and highlights increasing risks as the climate changes. The Swedish portal for climate change adaptation<sup>19</sup> provides information on possible impacts in a wide variety of sectors. There are also a number of sector-specific information portals and websites, for example the Flood portal<sup>20</sup> and the map service for landslides and erosion<sup>21</sup>

#### **3c. Sound climate risks/vulnerability assessments for priority vulnerable sectors are undertaken to support adaptation decision making**

**Yes** / In progress / No

In 2007, a report<sup>22</sup> was issued by the Swedish Commission on Climate and Vulnerability, called "Sweden facing climate change – threats and opportunities". Since then, the work on climate change adaptation has been strengthened in Sweden and many agencies are

---

<sup>17</sup> <http://www.smhi.se/en/climate/climate-indicators/climate-indicators-1.91461>

<sup>18</sup> <https://www.smhi.se/en/climate/climate-scenarios>

<sup>19</sup> [www.klimatanpassning.se](http://www.klimatanpassning.se)

<sup>20</sup> <https://www.msb.se/sv/Forebyggande/Naturolyckor/Oversvamning/>

<sup>21</sup> <http://www.swedgeo.se/sv/produkter--tjanster/kartor-data-och-verktyg/vagledning-ras-skred-erosion/>

<sup>22</sup> <http://www.swedgeo.se/sv/produkter--tjanster/kartor-data-och-verktyg/vagledning-ras-skred-erosion/>



## DRAFT

gradually developing adaptation strategies in their respective fields. Information is available for impacts at the sectoral level: Energy, Spatial planning and housing, Cultural Heritage, Agriculture and forestry, Natural environment and ecosystems, Land and soil, Water and sewer, Health care and the impact on Sweden of global changes. A follow up as made by the SMHI in 2015 in the report "Basis for Check point 2015 for adaptation to a changing climate". In 2016 and 2017, a number of sectoral action plans have been developed, and these also contain risks/ vulnerability assessments.

### **3d. Climate risks/vulnerability assessments take transboundary risks into account, when relevant**

Yes / **In progress** / No

Climate risks/vulnerability assessments sometimes take transboundary risks into account where relevant, usually in research projects. In the Nordic region, collaboration is under way on the national web portals for climate adaptation and on the development of climate services. Swedish researchers are involved in many international research projects and programmes that address adaptation, such as JPI Climate and the Nordic Top-Level Research Initiative (TRI): Collaboration Projects Green Growth in an Era of Climate Change and the Nordic Centre of Excellence (NCoE) NORD-STAR aiming to develop tools to help the Nordic countries address the twin challenge of a warmer climate and the side effects of policy impacts. Sweden supports integration of climate adaptation in development collaboration programmes. While these examples demonstrate a significant number of transnational initiatives, they appear to be often project-based and have not reached the stage of planning for actual transboundary adaptation initiatives.

## **4. Knowledge gaps**

### **4. Work is being carried out to identify, prioritise and address the knowledge gaps**

**Yes** / In progress / No

The Government presented its most recent bill on research policy for a ten-year perspective, with a particular focus on investments 2017-2020, in 2016. Based on the proposals in the bill, the Swedish Research Council Formas was commissioned in May 2017 to set up two ten-year national research programs on climate and on sustainable urban development. The programs shall promote community-relevant research on among other things climate adaptation.

Human impact on climate is seen as one of the major challenges to humankind that cannot be addressed successfully without new knowledge. Climate change and preserving biodiversity, the marine environment and a non-toxic environment are the Government's top environmental priorities<sup>23</sup>. Various institutions fund climate adaptation research, notably the Swedish Foundation for Strategic Environmental Research (MISTRA), the Swedish Research Council and the Swedish Environmental Protection Agency (SEPA). Public and private stakeholders are encouraged or required to be engaged in many of the funded projects (notably MISTRA, SEPA) both in the projects themselves as well as in their Advisory Boards. In setting priorities for programming the emphasis is on representatives from science administration rather than from societal stakeholder groups or policy makers and more on an ad hoc basis rather than in a formal setting. Identified knowledge gaps are used to prioritise public funding for research on

---

<sup>23</sup> Altogether, there are 24 strategic research areas identified, including climate models, effects on natural resources, ecosystem services and biodiversity, and research on the marine environment.

## DRAFT

impacts, vulnerabilities and adaptation to climate change, but are often not identified systematically. MISTRA (an important non-governmental research funder) has recently asked an international group of experts to evaluate MISTRA climate research and advise on knowledge gaps and future research priorities.

Knowledge gaps have also been identified and addressed in various ways, for example in some of the national authorities' action plans. One of the identified knowledge gaps concerns the management of storm water, where the challenge has been analysed by Environment Protection Agency<sup>24</sup>.

### 5. Knowledge transfer

#### **5a. Adaptation relevant data and information is available to all stakeholders, including policy makers (e.g. through a dedicated website or other comparable means)**

**Yes** / In progress / No

The Swedish Meteorological and Hydrological Institute (SMHI) manages a national knowledge centre for climate change adaptation since 2012. The centre collects, develops and disseminates information about climate change, through publications, seminars, lectures, films, education material for schools, etc.

The Centre also runs the web portal for adaptation, a joint initiative between SMHI and 19 other national government agencies, including the Swedish Environmental Protection Agency, the Swedish Civil Contingencies Agency, the Swedish Geotechnical Institute and the National Board of Housing, Building and Planning and in cooperation with Sweden's municipalities and county councils. The aim of the portal is to support those who work on adaptation issues at all levels of Swedish society. Every agency is responsible for their area of expertise and the combination gives a broad spectrum of information. The portal contains information about the effects of climate change, risk management, how an adaptation plan can be developed and examples of how climate change adaptation can be integrated in daily work. The portal provides information to support both short and long-term adaptation. There is a special emphasis on content for municipalities and county administrative boards. A dialogue is held between the agencies to gradually develop the portal at regular intervals. There is also ongoing communication with the other Nordic portals and the EU portal Climate-ADAPT.

There are numerous knowledge centres in Sweden for climate information that promote active dialogue for the purpose of providing knowledge and high quality decision support in the area of climate change mitigation and adaptation for the public and business sectors as well as for citizens, such as the Swedish Environmental Protection Agency, Swedish Energy Agency, Swedish Consumer Agency, Swedish Forest Agency, Swedish Board of Agriculture, SMHI, Swedish Transport Administration, Swedish Defence Research Agency and the Swedish Civil Contingencies Agency which has a national database for natural hazards.

#### **5b. Capacity building activities take place; education and training materials on climate change adaptation concepts and practices are available and disseminated**

**Yes** / In progress / No

The Government founded the Swedish National Knowledge Centre for Climate Change Adaptation at the SMHI in 2012. The work of the Centre is guided by the instructions

---

<sup>24</sup> <http://www.naturvardsverket.se/upload/miljoarbete-i-samhallet/miljoarbete-i-sverige/regeringsuppdrag/2017/analys-kunskapslaget-dagvattenproblematiken.pdf>

## DRAFT

given by the Government, according to strategic priorities. These are identified by systematic analysis of stakeholder requirements, for example with the help of the Network on Adaptation, and informed by SMHIs climate expertise and research.

The Centre collects, develops and shares research, information from authorities and learning examples to facilitate sound decision making. The Centre also offers lectures and customised training courses on climate change for companies, municipalities and government authorities. The Swedish portal for climate change adaptation includes a lot of useful materials, including case studies which offer insights that can be transferred to other areas, and tools such as VisAdapt which is designed to guide homeowners to reduce weather-related impacts, and aims to increase Nordic homeowners' adaptive capacity to climate change, enabling homeowners to visualise weather-related risks affecting their homes by their specific input. SMHI also offers courses on capacity building in developing countries. Interactions with counties, municipalities and businesses (see 2a) could be regarded as having a capacity-building element.

In addition, there are several examples of innovative approaches to disseminating knowledge about adaptation. One example is the on-line courses offered by the National Board of Housing, Building and Planning through their online academy<sup>25</sup>. Another example is production of specific films for certain target groups, for example, on adaptation to heat waves, offered by the Public Health Authority<sup>26</sup>.

### Step C: identifying adaptation options

#### 6. Adaptation options' identification

##### 6a. Adaptation options address the sectoral risks identified in 3c, the geographical specificities identified in 3b and follow best practices in similar contexts

**Yes / No**

The adaptation options are based on early analysis in the 2007 report, which identifies both climate risks and corresponding adaptive measures to reduce the vulnerability of each sector concerned. This was updated in 2015 by SMHI in the report "Basis for Check point 2015 (for adaptation to a changing climate?)"<sup>27</sup>. The report was developed in cooperation with a large number of government agencies and other stakeholders from among others the private sector. About 30 government agencies covering key vulnerable sectors<sup>28</sup> are working with different actions, such as developing guidelines or altering existing policies. Several government agencies have developed sectorial action plans, which include risk assessments and identification of adaptation options (see 3c). Adaptation options have also been identified by the CABs in the regional adaptation action plans.

---

<sup>25</sup> <https://boverket.onlineacademy.se/external/play/2331>

<sup>26</sup> <https://www.folkhalsomyndigheten.se/livsvillkor-levnadsvanor/miljohalsa-och-halsoskydd/beredskap-vid-varmebolja/>

<sup>27</sup> [http://www.smhi.se/polopoly\\_fs/1.86329!/Menu/general/extGroup/attachmentColHold/mainCol1/file/Klimatologi%20Nr%2012.pdf](http://www.smhi.se/polopoly_fs/1.86329!/Menu/general/extGroup/attachmentColHold/mainCol1/file/Klimatologi%20Nr%2012.pdf)

<sup>28</sup> <http://www.klimatanpassning.se/roller-och-ansvar/genomforda-aktiviteter/vad-har-gjorts-pa-myndigheterna-1.100055>

## DRAFT

### **6b. The selection of priority adaptation options is based on robust methods (e.g. multi-criteria analyses, stakeholders' consultation, etc.) and consistent with existing decision-making frameworks**

**Yes** / No

Since selection of priority adaptation options is taking place at the local, regional and sectoral levels, it is difficult to assess this in general terms. However, at the regional level, actions highlighted in the regional action plans are selected and prioritised based on expert judgement and stakeholder consultation. The same is true for the national sectoral action plans.

### **6c. Mechanisms are in place to coordinate disaster risk management and climate change adaptation and to ensure coherence between the two policies**

Yes / **In progress** / No

Sweden has a framework for disaster risk reduction (DRR), including work in forums<sup>29</sup> for crisis preparedness. The work is coordinated by the Swedish Civil Contingencies Agency (MSB<sup>30</sup>). The County Administrative Boards are responsible for acting as coordinators with regards to disaster risk reduction within their geographical area. No evidence is provided how climate change adaptation practitioners are involved in such forums.

All counties, municipalities and other local authorities are required to carry out a risk and vulnerability assessment (RVA)<sup>31</sup>. Climate change adaptation is an integral part of the RVA. The MSB supports municipalities and county administrative boards to integrate climate change adaptation in their work. MSB has developed several pieces of guidance on how to integrate climate adaptation in the municipal RVAs. Several risk scenarios, such as on heat waves, floods and cloud burst are made available to be used in the planning of crisis preparedness.

## **7. Funding resources identified and allocated**

### **7. Funding is available to increase climate resilience in vulnerable sectors and for cross-cutting adaptation action**

**Yes** / In progress / No

In 2018, SEK214 million of public funding is allocated for adaptation to climate change for national scenarios and climate services, capacity building, the Swedish National Knowledge Centre for Climate Change Adaptation and the climate adaptation portal.

Through this allocation, resources are also provided to a number of public bodies, such as SMHI, MSB, the Swedish Mapping, Cadastral and Land Registration Authority and the Swedish Geotechnical Institute to further develop knowledge in the area of adaptation. Activities financed include flood mapping, mapping of landslides and erosion, mapping of heavy rainfall and a national elevation model. From 2018, funding has also been earmarked for work on preventing landslides in a particularly vulnerable area of Sweden.

Besides the above mentioned allocation for adaptation, national government funding for climate change adaptation is made available through funding to prevent or mitigate the negative consequences of natural hazards. Through this appropriation funding (SEK75

---

<sup>29</sup> <https://www.msb.se/RibData/Filer/pdf/27455.pdf>

<sup>30</sup> <https://www.msb.se/>

<sup>31</sup> <https://www.msb.se/sv/Forebyggande/Krisberedskap/Risk--och-sarbarhetsanalyser/>

## DRAFT

million in 2017) is made available for municipalities to take disaster risk reduction or prevention measures.

### **Step D: Implementing adaptation action**

#### **8 Mainstreaming adaptation in planning processes**

##### **8a. Consideration of climate change adaptation has been included in the national frameworks for environmental impact assessments**

**Yes** / No

Climate change is implicitly included in the Sweden Environment Code (1999), requiring that an environmental impact assessment be carried out before permission can be given for an environmentally hazardous activity. This will become even more apparent when implementing the latest changes to the EIA Directive. Sweden's government has adopted the 2016/17 Bill: 200 Environmental Assessments, which are now being prepared by the Swedish Parliament (Riksdag). Proposed entry into force is January 1, 2018.

##### **8b. Prevention/preparedness strategies in place under national disaster risk management plans take into account climate change impacts and projections**

Yes / **No**

This indicator has only "yes" and "no" as an assessment option. Although risk analyses of future climate extremes are conducted, it is not clear how these analyses are factored in disaster risk management plans.

Since 2007, Sweden has a National Platform for Disaster Risk Reduction. In 2016, a summary of risk areas and scenario analyses 2012–2015 was published by the The Swedish Civil Contingencies Agency (MSB)<sup>32</sup> which covered climate-related risks<sup>33</sup>. The report presents an overall compilation of various types of risks facing Sweden which can lead to serious consequences for Sweden. To facilitate the compilation of risks, MSB has sorted them into four main categories, including: natural events, major accidents, technical infrastructure disturbance and supply systems. Under each category there is a description of the types of risks that may arise, the consequences they can lead to, the examples of events that occurred and how liability conditions in Sweden look like linked to the risks. In cases where MSB conducted a scenario analysis associated with the risk area, the result is presented after the initial risk description. Each scenario has been analysed based on society's ability to prevent and manage the scenario and based on possible consequences on Swedish protection values. Respective analysis also contains reasoning, probability and uncertainty about the scenario.

The MSB's website contains information on many climate risks<sup>34</sup>, such as flooding, heat waves, land slides, coastal erosion, forest fires and other that are relevant for crisis preparedness. A new portal providing an overview with flood maps has been developed. These maps are an important basis for climate adaptation, spatial planning and risk management. MSB conducts regular research<sup>35</sup> in the area of natural disasters and climate change adaptation.

---

<sup>32</sup> <https://www.msb.se/>

<sup>33</sup> <https://www.msb.se/RibData/Filer/pdf/26229.pdf>

<sup>34</sup> <https://www.msb.se/sv/Forebyggande/Naturolyckor/Oversvamnning/Oversiktlig-oversvamningskartering/>

<sup>35</sup> <https://www.msb.se/sv/Forebyggande/Naturolyckor/Forskning/>

## DRAFT

The Swedish Meteorological and Hydrological Institute provides early warnings of hazardous meteorological, hydrological and oceanographic events.

### **8c. Key land use, spatial planning, urban planning and maritime spatial planning policies take into account the impacts of climate change**

**Yes** / No

Since May 2011 the new Planning and Building Act has been in force. Several provisions in the new Act were prompted by climate problems. Municipal plans should play a key role in climate change adaptation, and environmental and climate aspects must be considered in planning and in reviewing other types of applications.

### **8d. National policy instruments promote adaptation at sectoral level, in line with national priorities and in areas where adaptation is mainstreamed in EU policies**

**Yes** / In progress / No

The Swedish climate adaptation work is to a large extent organised into sectors. Since 2015, several national agencies have developed or are currently developing action plans. 12 of these have been developed using funds made available by SMHI to support the development of policy instruments for adaptation, according to the appropriation directions in 2016 and 2017. Prioritised sectors have been food production, human health, national environmental objectives and planning/construction. So far, sectors that have received funds include forestry, human health, construction/land use and reindeer herding/sami culture. Using the same funds, 12 tools to assist with adaptation work have been developed. These include tools to handle uncertainties in adaptation work, nature-based methods to prevent flooding and designs to prevent beach erosion.

Another example of adaptation at the sectoral level is the work at the Swedish Transport Agency. A proposal has been submitted for a new national transport system for the 2018-2029 time period. The initiative includes implementing risk mitigation measures to adapt the regional and national road network to climate change. This was included in the Governmental mission to the Agency, which was the basis for the development of the plans. The plans are now on referral.

### **8e. Adaptation is mainstreamed in insurance or alternative policy instruments, where relevant, to provide incentives for investments in risk prevention**

**Yes** / No

The Insurance Contracts Act (2005:104) is based on the fact that insurance companies themselves should decide which risks they are prepared to take responsibility for. An insurance in Sweden is a comprehensive product that covers many types of accidents and damages. Thus, damage from natural disasters is usually included in the insurance companies' regular products. This also means that the part of the premium relating to damage caused by natural disasters is difficult to distinguish.

In some cases, adjustment of a premium can be made in certain cases after damage has occurred. For example, a customer can avoid an increased premium by taking preventive measures. However, this is normally an agreement between the customer and the insurance policy, and is not made public.

The importance of climate change for insurance has been recognized<sup>36</sup>. For example, the Swedish Financial Inspection coordinates a forum with participation of insurance

---

<sup>36</sup> <http://www.svenskforsakring.se/en/articles2/20162/high-time-for-more-climate-adaptation/>

## DRAFT

bodies and other financial institutions, in order to strengthen the robustness of financial sector locally, regionally and nationally. In 2015, the Swedish Insurance industry notes that "insurance companies do not have any formal responsibility for climate adaptation, but play an important part as they deal with claims and compensate policyholders affected." Insurance Sweden has for the last three years financed studies on the level of adaptation of Swedish municipalities, following the EU adaptation strategy principles.

### 9. Implementing adaptation

#### 9a. Adaptation policies and measures are implemented, e.g. as defined in action plans or sectoral policy documents

Yes / **In progress** / No

Action plans have been developed for many sectors, and the measures they put forward are also starting to be implemented. Some sectors are further ahead than others.

At the regional level, all 21 regions have action plans with identified measures of action. These are being implemented, and are followed up yearly. Recommendations have been developed for physical planning, and are being used for guiding the planning processes of municipalities.

At the municipality level, reporting done by the CABs show that adaptation is to an increasing extent taken into account in planning processes, particularly when it comes to physical planning, risk- and vulnerability analysis and care for cultural heritage. This can also be seen in concrete projects and developments, some of which are presented at the Adaptation web portal. Larger cities tend, in general, to have come further in their adaptation work than small cities. The focus of the work is also largely guided to the geographical context, as this often determines the risks and opportunities that face the municipalities.

Sweden's municipalities are obliged to carry out risk and vulnerability assessments as a basis for coping with extraordinary events and crises under the Act on municipal and county council measures prior to and during extraordinary events in peacetime and during periods of heightened alert – such risk assessment often lead to the development and implementation of adaptation measures in vulnerable locations.

#### 9b. Cooperation mechanisms in place to foster and support adaptation at relevant scales (e.g. local, subnational)

**Yes** / No

The roles and responsibilities of climate change adaptation in Sweden are divided across different levels – from local and regional to national. The collaboration between the different sectorial responsibilities is essential to achieve the adaptation targets. The County Administrative Boards (CABs) are responsible of the coordination of climate change adaptation at the regional level<sup>37</sup>. There are climate adaptation coordinators in each county that have the mission to assist the municipalities in their county. Each county produces reports, analysis and other material on climate change adaptation available on its website.

#### 9c. Procedures or guidelines are available to assess the potential impact of climate change on major projects or programmes, and facilitate the choice of alternative options, e.g. green infrastructure

**Yes** / No

---

<sup>37</sup> <http://www.klimatanpassning.se/roller-och-ansvar/vem-har-ansvaret/regionalt-1.26916>

## DRAFT

The Swedish adaptation portal contains guidance materials for planning and implementing adaptation measures, but there are no formal guidelines. Some sectoral portals may include some suggestions for assessment tools. The CABs have developed several guides, for example guidance on climate adaptation in physical planning<sup>38</sup> (2012) and "Health Effects of Climate Change – risks and actions in Stockholm County"<sup>39</sup>, which outlines appropriate human health-related actions based on climate scenarios for the region until the year 2100. The plan clearly outlines management and coordination mechanisms for an effective response, and recognises the need for additional measures for vulnerable areas and social groups (e.g. children and persons above a certain age). Currently, the CABs are working on regional action plans for green infrastructure, to be completed in 2018. In 2014 Sweden adopted a strategy on strengthening biodiversity<sup>40</sup> and securing ecosystem services, which promotes green infrastructure and notes links with climate change, but a formal link with climate change adaptation or disaster risk reduction is not apparent.

Climate change is taken into account in a systematic way for large infrastructure projects, for example, the rebuilding of Slussen in Stockholm and for the construction of a railway tunnel underneath the city of Gothenburg. This is done through project-specific collaborations with the public and private sectors.

### **9d. There are processes for stakeholders' involvement in the implementation of adaptation policies and measures**

**Yes** / No

Many of the actions identified in the regional action plans on adaptation are to be implemented by different stakeholders. The same is true for the sectoral action plans, for example for forestry and agriculture, where landowners are the target of knowledge dissemination measures and will in turn carry out the implementation activities. As noted also in 2a, Sweden strongly values involvement of stakeholders in all stages of the policy cycle, and all major projects and policy developments will have a strong element of stakeholder participation.

## **Step E: Monitoring and evaluation of adaptation activities**

### **10. Monitoring and reporting**

#### **10a. NAS/NAP implementation is monitored and the results of the monitoring are disseminated**

Yes / **No**

**Sweden** recognises the need to develop suitable instruments and indicators to evaluate adaptation concepts and measures as stated in the comprehensive assessment report 'Basis for 2015 checkpoint'<sup>41</sup> on the Swedish climate change adaptation strategy and the actions being taken since 2007 that was submitted to the Government on March 4<sup>th</sup> 2015. It is proposed that a close cooperation should take place with the European Environment Agency to ensure the comparability of the to-be Swedish indicator-based evaluation concept, with the activities of the European Commission.

---

<sup>38</sup> <http://www.lansstyrelsen.se/stockholm/SiteCollectionDocuments/Sv/publikationer/2012/klimatanpassning-fysisk-planering.pdf>

<sup>39</sup> <http://www.lansstyrelsen.se/stockholm/SiteCollectionDocuments/Sv/publikationer/2012/halsoeffekter-av-ett-forandrat-klimat.pdf>

<sup>40</sup> <https://www.cbd.int/doc/world/se/se-nbsap-v3-en.pdf>

<sup>41</sup>

[http://www.smhi.se/polopoly\\_fs/1.86326!/Menu/general/extGroup/attachmentColHold/mainCol1/file/Klimatologi%20Nr%2012.pdf](http://www.smhi.se/polopoly_fs/1.86326!/Menu/general/extGroup/attachmentColHold/mainCol1/file/Klimatologi%20Nr%2012.pdf)



## DRAFT

A subsequent study<sup>42</sup> has been carried out by the SMHI in order to propose a system for evaluating and monitoring the work on adaptation in Sweden. The proposed evaluation model focuses on three main pillars: 1) What processes are needed for an efficient adaptation work on the ground? To what extent is adaptation action integrated in the Swedish governance system? 2) What has been implemented to reduce the negative impacts / vulnerability? Which are the priority sectors and what challenges have been addressed? 3) Proposal for further action to reduce the negative effects of climate change.

The conclusion of the study is that a strategic national framework for climate change adaptation is needed to achieve effective and continuous implementation. The framework should be based on a policy cycle in line with the EU Adaptation Strategy.

At the moment, however, monitoring and reporting is instead carried out in other ways. The CABs report annually to the Government on the implementation of their regional action plans. National agencies that receive funds from the allocation "Adaptation to climate change" report annually on their actions. A short summary of actions taken is included in the budget bill to the Parliament. Municipalities report on their activities to the CABs.

### **10b. The integration of climate change adaptation in sectoral policies is monitored and the results of the monitoring are disseminated**

Yes / **No**

In the "Basis for 2015 checkpoint" progress is evaluated. This is however not a systematic, sustained monitoring mechanism, which links national prioritised sectors to progress of integrating adaptation in sectoral policies.

The ongoing adaptation work in sectors is published on the adaptation website<sup>43</sup>. The level of adaptation action in sectors seem to vary. Sectoral bodies with an action plan for adaptation have included monitoring mechanisms. Some specific monitoring tasks have also been allocated. For example, the Public Health Agency has been tasked to monitor the health situation among the population, including factors related to climate change.

### **10c. Regional-, sub-national or local action is monitored and the results of the monitoring are disseminated**

Yes / **No**

No evidence covering the full overview of monitoring of local and sub-national action seems to be available.

In addition to the formal MRE processes, a report is published on an annual basis<sup>44</sup> by Swedish Insurance and IVL, looking into the progress of adaptation in the municipalities, and creating a ranking.

There is a formal review process in place through the Regional action plans prepared by the CABs. These are followed up on a yearly basis (this task is assigned to the CABs by the government). A recent list of activities carried out by the national authorities is available as well.<sup>45</sup>

---

<sup>42</sup> <https://www.smhi.se/publikationer/publikationer/forslag-till-en-metod-for-uppfoljning-av-det-nationella-klimatanpassningsarbetet-redovisning-av-ett-regeringsuppdrag-december-2016-1.113425>

<sup>43</sup> <http://www.klimatanpassning.se/roller-och-ansvar/kommande-underlag/pa-gang-fran-myndigheterna-2017-1.119693>

<sup>44</sup> (<http://www.ivl.se/download/18.21c9e44015c64dbb1b4159/1496844140532/Klimatanpassning%202017.pdf>)

<sup>45</sup> <http://www.klimatanpassning.se/roller-och-ansvar/kommande-underlag/pa-gang-fran-myndigheterna-2017-1.119693>

## 11. Evaluation

### 11a. A periodic review of the national adaptation strategy and action plans is planned

Yes / **No**

In the absence of a formal NAS, no formal evidence on the review of a NAS is available. However, a report "Basis for Check point 2015"<sup>46</sup> for adaptation to a changing climate in Sweden assesses the progress in Swedish adaptation measures to ensure that the climate adaptation work is proceeding towards the same goal, addressing the questions: what priorities should be given, how can cross-sectoral work be developed further, and: what are the appropriate governance arrangements? This is not a formal periodic review, but gives useful insights in the progress made in Sweden in implementing adaptation actions. Work is currently ongoing to establish suitable systems for review.

### 11b. Stakeholders are involved in the assessment, evaluation and review of national adaptation policy

Yes / **No**

In the absence of a formal NAS, it cannot be reviewed. However, in preparing the report "Basis for Check point 2015", stakeholders were consulted.

---

46

[http://www.smhi.se/polopoly\\_fs/1.86326!/Menu/general/extGroup/attachmentColHold/mainCol1/file/Klimatologi%20Nr%2012.pdf](http://www.smhi.se/polopoly_fs/1.86326!/Menu/general/extGroup/attachmentColHold/mainCol1/file/Klimatologi%20Nr%2012.pdf)

## DRAFT

### SUMMARY TABLE

<b>Adaptation Preparedness Scoreboard</b>		
No.	Indicator	Met?
<b>Step A: Preparing the ground for adaptation</b>		
<b>1 Coordination structure</b>		
1a	A central administration body officially in charge of adaptation policy making	<b>Yes</b> / No
1b	Horizontal (i.e. sectoral) coordination mechanisms exist within the governance system, with division of responsibilities	Yes / <b>In progress</b> / No
1c	Vertical (i.e. across levels of administration) coordination mechanisms exist within the governance system, enabling lower levels of administration to influence policy making.	Yes / <b>In progress</b> / No
<b>2 Stakeholders' involvement in policy development</b>		
2a	A dedicated process is in place to facilitate stakeholders' involvement in the preparation of adaptation policies	<b>Yes</b> / No
2b	Transboundary cooperation is planned to address common challenges with relevant countries	<b>Yes</b> / No
<b>Step B: Assessing risks and vulnerabilities to climate change</b>		
<b>3 Current and projected climate change</b>		
3a	Observation systems are in place to monitor climate change, extreme climate events and their impacts	Yes / <b>In progress</b> / No
3b	Scenarios and projections are used to assess the economic, social and environmental impacts of climate change, taking into account geographical specificities and best available science (e.g. in response to revised IPCC assessments) Yes / In progress / No (e.g. in response to revised IPCC assessments)	<b>Yes</b> / In progress / No
3c	Sound climate risks/vulnerability assessments for priority vulnerable sectors are undertaken to support adaptation decision making.	<b>Yes</b> / In progress / No
3d	Climate risks/vulnerability assessments take transboundary risks into account, when relevant	Yes / <b>In progress</b> / No
<b>4 Knowledge gaps</b>		
4	Work is being carried out to identify, prioritise and address the knowledge gaps	<b>Yes</b> / In progress / No
<b>5 Knowledge transfer</b>		
5a	Adaptation relevant data and information is available to all stakeholders, including policy makers (e.g. through a dedicated website or other comparable means).	<b>Yes</b> / In progress / No

## DRAFT

<b>Adaptation Preparedness Scoreboard</b>		
<b>No.</b>	<b>Indicator</b>	<b>Met?</b>
5b	Capacity building activities take place; education and training materials on climate change adaptation concepts and practices are available and disseminated	<b>Yes</b> / In progress / No
<b>Step C: Identifying adaptation options</b>		
<b>6 Identification of adaptation options</b>		
6a	Adaptation options address the sectoral risks identified in 3c, the geographical specificities identified in 3b and follow best practices in similar contexts	<b>Yes</b> / No
6b	The selection of priority adaptation options is based on robust methods (e.g. multi-criteria analyses, stakeholders' consultation, etc.) and consistent with existing decision-making frameworks	<b>Yes</b> / No
6c	Mechanisms are in place to coordinate disaster risk management and climate change adaptation and to ensure coherence between the two policies	Yes / <b>In progress</b> / No
<b>7 Funding resources identified and allocated</b>		
7	Funding is available to increase climate resilience in vulnerable sectors and for cross-cutting adaptation action	<b>Yes</b> / In progress / No
<b>Step D: Implementing adaptation action</b>		
<b>8 Mainstreaming adaptation in planning processes</b>		
8a	Consideration of climate change adaptation has been included in the national frameworks for environmental impact assessments	<b>Yes</b> / No
8b	Prevention/preparedness strategies in place under national disaster risk management plans take into account climate change impacts and projections	Yes / <b>No</b>
8c	Key land use, spatial planning, urban planning and maritime spatial planning policies take into account the impacts of climate change	<b>Yes</b> / No
8d	National policy instruments promote adaptation at sectoral level, in line with national priorities and in areas where adaptation is mainstreamed in EU policies	<b>Yes</b> / In progress / No
8e	Adaptation is mainstreamed in insurance or alternative policy instruments, where relevant, to provide incentives for investments in risk prevention	<b>Yes</b> / No
<b>9 Implementing adaptation</b>		
9a	Adaptation policies and measures are implemented, e.g. as defined in action plans or sectoral policy documents	Yes / <b>In progress</b> / No
9b	Cooperation mechanisms in place to foster and support adaptation at relevant scales (e.g. local, subnational)	<b>Yes</b> / No
9c	Procedures or guidelines are available to assess the potential impact of climate change on major projects or programmes,	<b>Yes</b> / No

## DRAFT

<b>Adaptation Preparedness Scoreboard</b>		
<b>No.</b>	<b>Indicator</b>	<b>Met?</b>
	and facilitate the choice of alternative options, e.g. green infrastructure	
9d	There are processes for stakeholders' involvement in the implementation of adaptation policies and measures.	<b><u>Yes</u></b> / No
<b>Step E: Monitoring and evaluation of adaptation activities</b>		
<b>10      <i>Monitoring and reporting</i></b>		
10a	NAS/NAP implementation is monitored and the results of the monitoring are disseminated	Yes / <b><u>No</u></b>
10b	The integration of climate change adaptation in sectoral policies is monitored and the results of the monitoring are disseminated	Yes / <b><u>No</u></b>
10c	Regional-, sub-national or local action is monitored and the results of the monitoring are disseminated	Yes / <b><u>No</u></b>
<b>11      <i>Evaluation</i></b>		
11a	A periodic review of the national adaptation strategy and action plans is planned	Yes / <b><u>No</u></b>
11b	Stakeholders are involved in the assessment, evaluation and review of national adaptation policy	Yes / <b><u>No</u></b>